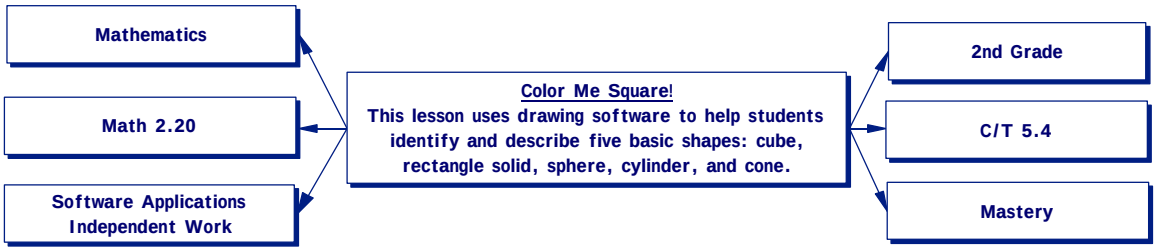

Color Me Square!

Betsy Weaver
Thomas C. Miller School for Innovation
Lynchburg City Public Schools

Curriculum Area	Mathematics
Subject Area	Geometry
Grade Level	2nd grade
Learning Objectives	• The student will be able to identify and describe five basic shapes: cube, rectangle solid, sphere, cylinder, and cone. • The student will be able to count the faces, edges, sides and bases, and corners of the shapes. • The student will be able to draw the shapes.
Correlation to the SOL	Math 2.20 C/T 5.4
Video/Technology Hardware/Software Needed	**For class:** Computer Computer Projection System Drawing software (such as *Microsoft Word*, *HyperStudio*, or *KidPix*) **For each student (or group of two students):** Computer connected to printer Drawing software (such as *Microsoft Word*, *HyperStudio*, or *KidPix*)
Materials Required	**For class:** Overhead Projector with transparency and transparency markers or blackboard Reference pictures for review of shapes Geometric shape models
Procedures/Activities	1. Using pictures or the overhead projector, review the names of the shapes, and the terms “faces,” “edges,” “bases,” and “corners.” 2. As a whole group, count the faces on each shape, and then continue with edges, sides and bases, and corners. 3. On the class computer, model the tools needed to draw each of these shapes. 4. Tell the students that they will need to create their own shapes using the drawing software. Take the students to a computer lab or use computers available in the classroom. Students may work alone or in groups of two to complete their own drawings of the shapes. 5. After completing the drawings, have the students use a text tool to add the names of the shapes next to them (teacher might select to have the students also add number of faces, edges, sides and bases, or corners) 6. Students print and submit their shape drawings to the teacher for evaluation.

Content Assessment	The student's work will be assessed for the accuracy of the shape and additional information asked for by the teacher.
Technology Integration Assessment	The student's work will be assessed for the ability to correctly use the drawing software and the ability to add text labels to the drawing.
Extensions	**Math:** • Create a three-dimensional shape by using *Microsoft Word*.(3-D shapes) • Create an open and closed shape in the drawing software. Test by filling with paint to see if closed. • Create a shape that is symmetrical to the best of their ability. Print, fold, and cut to test its symmetry. • Show ITV video *Math Monsters #105 Geometry*. This entire series consists of 15-minute math programs for K-2 covering various math skills. • Other ITV programs that support this particular SOL are *Mathtalk #118 & #119*. These shows are 15 minutes long and are on an upper elementary level, but may work well with your students. **Art:** • Do an art lesson on symmetry, whether it is a drawing lesson, or folding shapes and designs. Check out a book on Origami for ideas. **English:** • Write a concrete poem in a particular shape. • Play "I Spy" for a particular shape that you are focusing on. **Physical Education:** • Have several students form with their bodies a particular shape then have others count the faces, edges, and corners.